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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR             | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|---|-------------|----------------------------------|---------------------------|------------------|
| 10/501,694  | 07/16/2004  | Renatus Josephus Van Der Vleuten | NL020029US                | 2762             |
| 24738 7590 04/23/2007<br>PHILIPS ELECTRONICS NORTH AMERICA CORPORATION<br>INTELLECTUAL PROPERTY & STANDARDS<br>1109 MCKAY DRIVE, M/S-41SJ<br>SAN JOSE, CA 95131 |             |                                  | EXAMINER<br>MOON, SEOKYUN |                  |
|   |             |                                  | ART UNIT<br>2629          | PAPER NUMBER     |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 04/23/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/501,694

Applicant(s)

VAN DER VLEUTEN ET AL.

Examiner

Seokyun Moon

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Arguments***

1. The Applicants' arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 9** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

The claim discloses "...*the means for recognizing the location...*".

However, Examiner respectfully submits that none of the prior disclosed claims, i.e. claims 1-8, discloses "*means for recognizing the location*".

As best understood by Examiner, the claim will be interpreted as "*The display device of claim 1, wherein the semiconductor IC device further comprises means for recognizing the location comprising at least one of the group comprising a read-only structure and a programmable memory.*" for further examination purpose.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art

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are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman et al. (US 2002/0142504, herein after "Feldman") and Ryan et al. (US 6,061,039, herein after "Ryan"), and further in view of Amagami et al. (US 5,402,149, herein after "Amagami").

As to **claim 1**, Feldman teaches a display device ("*display module*") [abstract line 1] comprising:

a substrate ("*12*") [fig. 8] provided with groups of pixels ("*206*") wherein each group of pixels is within a separate defined area on the substrate; and

a driver ("*digital signal processing circuitry 70*") [fig. 8], wherein each driver

is mainly associated with a different group of pixels,

is positioned within the defined area of the group of pixels that it is mainly associated with,

includes drive means for driving pixels dependent on data to be displayed [par. (0047) lines 16-28].

Feldman does not teach the driver being a semiconductor IC device.

However, Ryan teaches a display device comprising a plurality of drivers ("*logic circuitry*") [col. 3 lines 51-52] each of which is comprised of a IC semiconductor device [col. 7 lines 14-16], and a plurality of pixels being driven by the drivers [col. 7 lines 16-20], wherein each of the IC semiconductor devices is connected through buses and is addressed with an unique address stored in each of the semiconductor devices [col. 7 lines 56-63].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the driver of the device of Feldman to be comprised of a semiconductor IC device and to include a storage means storing the address corresponding to each of the driver, and to modify the device of Feldman to use a bus to transmit and receive data between each of the

drivers, as taught by Ryan, in order to allow the device of Feldman to address a particular display element among the plurality of the display elements of the device easily by providing computing capabilities of a IC semiconductor at each of the display element.

Feldman as modified by Ryan does not teach the semiconductor IC device to include a picture scaling means.

However, Amagami teaches a driver for a display including a picture scaling means.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Feldman as modified by Ryan to include a picture scaling means, as taught by Amagami, in order to allow the modified display device to be compatible with various images having different resolution.

As to **claim 2**, Feldman as modified by Ryan and Amagami teaches the picture scaling means comprising means to determine the kind of scaling (Amagami: scaling the data according to an expansion ratio) [Amagami: abstract lines 5-9] to be performed.

As to **claim 3**, Feldman as modified by Ryan and Amagami teaches the picture scaling means providing several pixels within its associated group of pixels with the same data voltages (Amagami: when the value of L01 is equal to the value of L00) [Amagami: fig. 7].

As to **claim 4**, Feldman as modified by Ryan and Amagami teaches the picture scaling means determining intermediate voltages (Amagami:  $(L00 + L01) / 2$ ) for neighboring pixels [Amagami: fig. 7].

As to **claims 5 and 6**, Feldman as modified by Ryan and Amagami [Amagami: fig. 22] teaches the picture scaling means determining intermediate voltages for pixels in neighboring columns and rows.

As to **claim 7**, Feldman as modified by Ryan and Amagami teaches the display comprising a connection (Ryan: "*bus*") between neighboring semiconductor IC devices [Ryan: col. 6 lines 62-64].

As to **claim 8**, Feldman as modified by Ryan and Amagami teaches the driving means comprising a frame memory (Feldman: "*frame buffer memory elements 43*") [Feldman: fig. 8] and means to detect changes between the contents of subsequent frames [Feldman: par. (0047) lines 30-33].

As to **claim 9**, Feldman as modified by Ryan teaches that each of the semiconductor IC device comprises a means (Ryan: "*ROM 45*") [Ryan: fig. 9] for recognizing the location comprising at least one of the group comprising a read-only structure and a programmable memory [col. 7 lines 59-60].

As to **claim 10**, Feldman as modified by Ryan teaches the drive means having a bus structure [Ryan: abstract lines 1-3].

### **Conclusion**

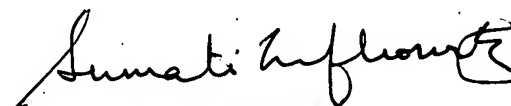
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (572) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 09, 2007

- s.m.

  
SUMATI LEKOWITZ  
SUPERVISORY PATENT EXAMINER